Medium-Mu Triode—Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC)	6.3	volts
Current	0.45 ± 6%	amp
Warm-up time (Average)	11	sec

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield*[a]	
Triode Unit:			←
Grid to plate	1.7	1.7	μμf
Grid to cathode, pentode cathode & pentode grid No.3 & internal shield, and heater	3	3.2	μμf
Plate to cathode, pentode cathode & pentode grid No.3 & internal shield, and heater	1.4	1.9	μμf
Pentode Unit:			
Grid No.1 to plate	0.02 max.	0.01 max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid-No.2, and heater	5	5	μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.6	3.4	μμf
Heater to cathode (Each unit)	3	3[b]	μμf

Characteristics, Class A_1 Amplifier:

	Triode Unit	*Pentode Unit*	
Plate-Supply Voltage	150	125	volts
Grid-No.2 Voltage	–	125	volts
Grid-No.1 Voltage	–	-1	volt
Cathode Resistor	56	–	ohms
Amplification Factor	40	–	
Plate Resistance (Approx.)	5000	200000	ohms ←
Transconductance	8500	6400	μmhos
Plate Current	18	12	ma
Grid-No.2 Current	–	4	ma
Grid-No.1 Voltage (Approx.) for plate μa = 10	-12	-9	volts

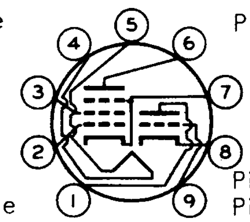
← Indicates a change.

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Mechanical:

Operating Position. . . . . Any
Maximum Overall Length. . . . . 2-3/16"
Maximum Seated Length . . . . 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip). . 1-9/16" ± 3/32"
Diameter. . . . . 0.750" to 0.875"
Dimensional Outline . . . . See *General Section*
Bulb. T6-1/2
Base. . . . . .Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9AE

Pin 1 - Triode Plate
Pin 2 - Pentode Grid No.1
Pin 3 - Pentode Grid No.2
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - Pentode Plate



Pin 7 - Pentode Cathode, Pentode Grid No.3, Internal Shield
Pin 8 - Triode Cathode
Pin 9 - Triode Grid

AMPLIFIER — Class A$_1$

Maximum Ratings, *Design-Maximum Values:*

	Triode Unit	*Pentode Unit*	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	–	330 max.	volts
GRID-No.2 VOLTAGE	–	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value . . .	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts	–	0.55 max.	watt
For grid-No.2 voltages between 165 and 330 volts	–	See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section	
→ PLATE DISSIPATION	2.5 max.	3.1 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. . .	200 max.	200 max.	volts
Heater positive with respect to cathode. . .	200[c] max.	200[c] max.	volts

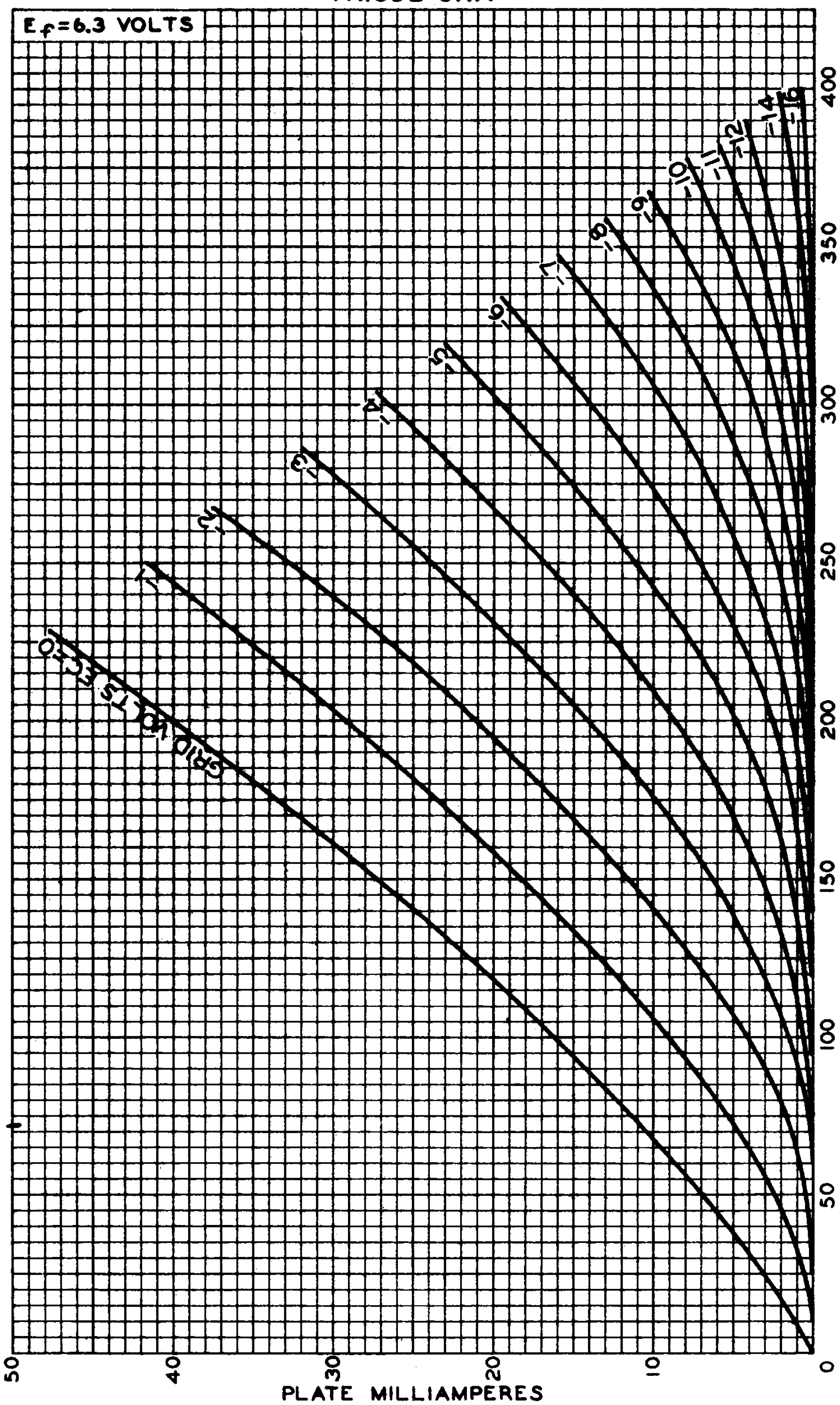
[a] With external shield JEDEC No.315 connected to cathode of unit under test except as noted.
[b] With external shield JEDEC No.315 connected to ground.
[c] The dc component must not exceed 100 volts.

→ Indicates a change.

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AVERAGE PLATE CHARACTERISTICS

TRIODE UNIT



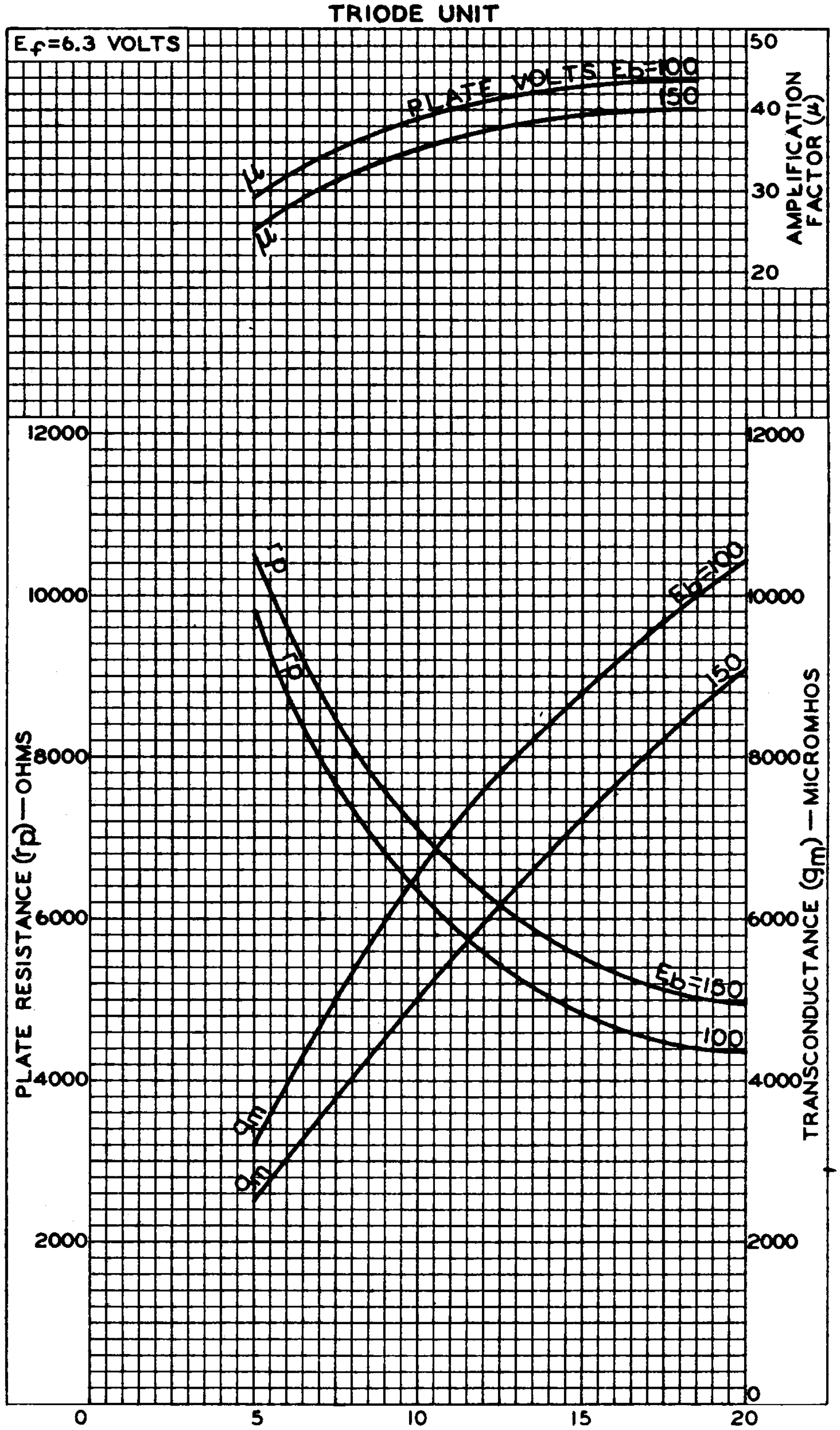
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AVERAGE CHARACTERISTICS

TRIODE UNIT



ELECTRON TUBE DIVISION 92CM-9882

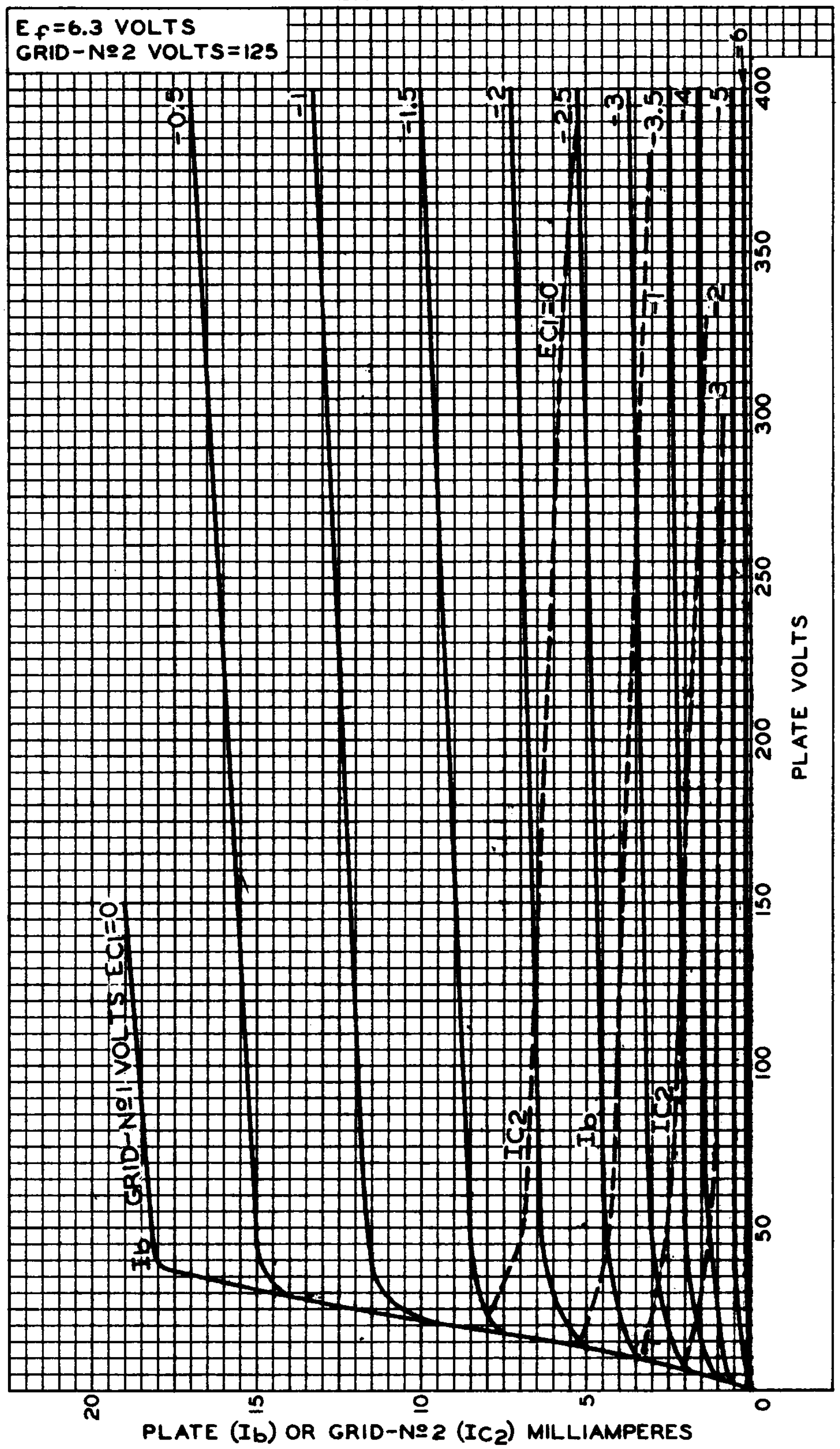
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AVERAGE CHARACTERISTICS
PENTODE UNIT



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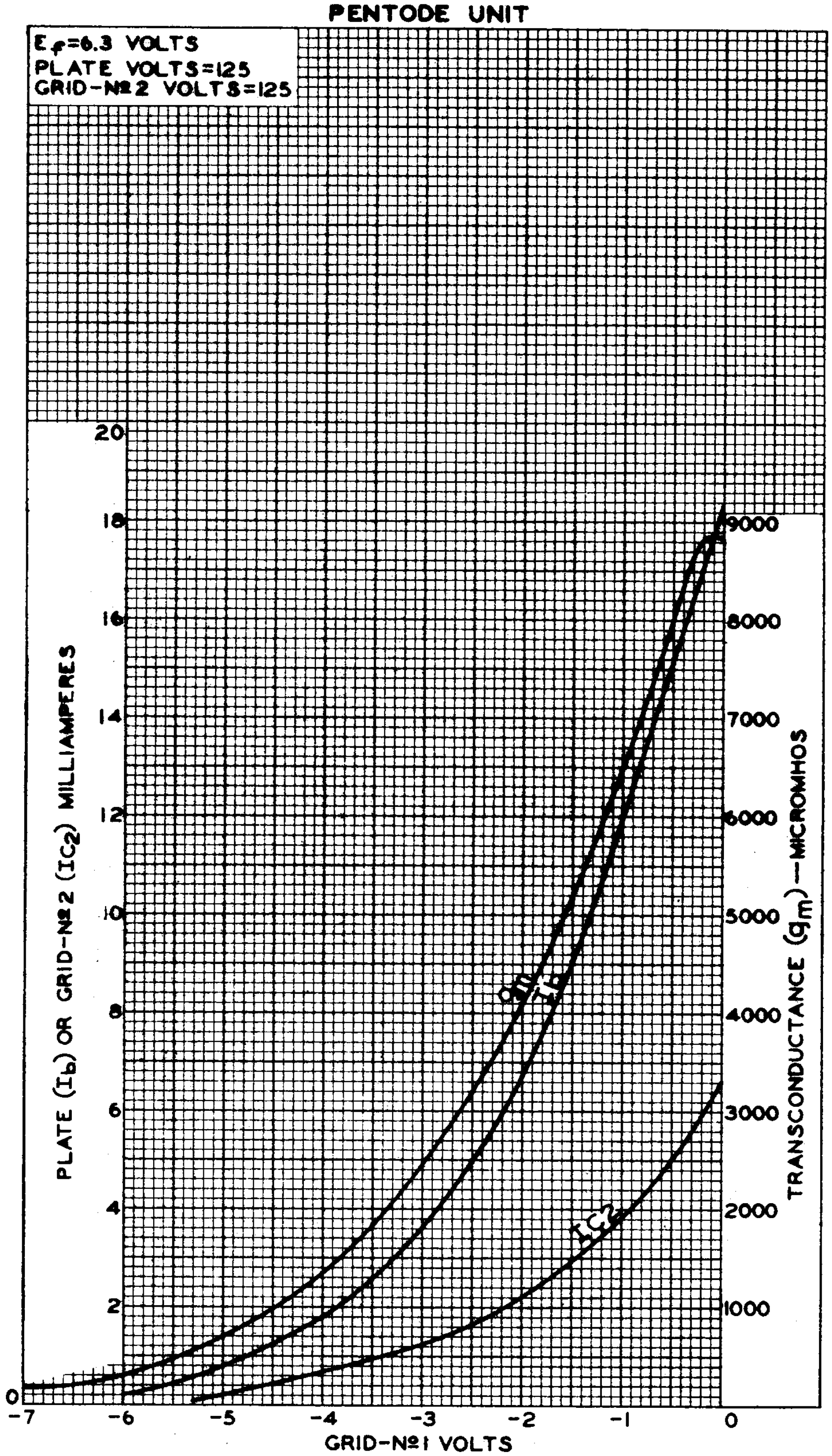
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AVERAGE CHARACTERISTICS

PENTODE UNIT



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